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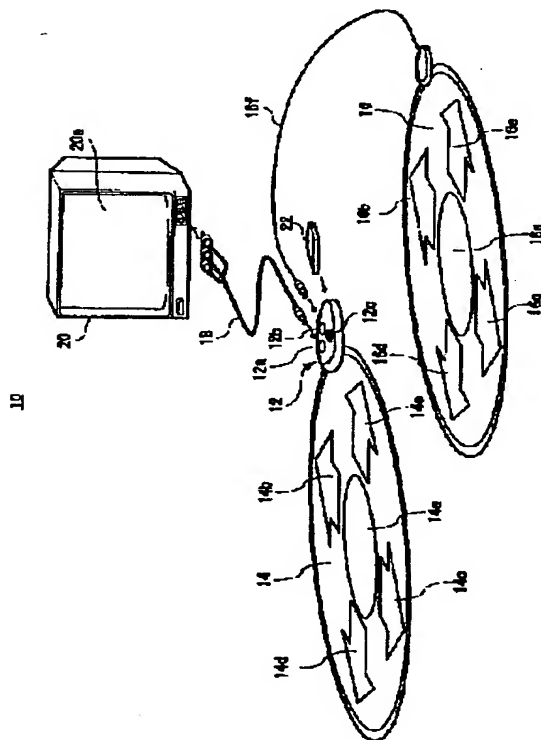
Summary

(57) [Abstract]

[Elements of the Invention] The game system 10 is formed in dance game equipment 12 in [the 1st controller 14] one including dance game equipment 12. Moreover, the 2nd controller 16 is connected to dance game equipment 12. ON of the power supply of dance game equipment 12 displays a profile selection screen, a game mode selection screen, a music selection screen, etc. on screen 20a of the home television receiver 20 one by one. According to guidance of each screen, by operating the 1st controller 14 and the 2nd controller 16 in step operation, a player can choose a profile, game mode, music (music), etc. (determination), and can carry out a dance game in the determined game mode.

[Effect] There is no troublesomeness which operates the controller of manual operation, and it can be operated easily.

[Translation done.]



[Translation done.]

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CLAIMS

[Claim(s)]

[Claim 1] In the dance game equipment containing the game processor which outputs the music corresponding to the aforementioned guidance screen while displaying the guidance screen which guides step operation of a player on a drop, detects the aforementioned step operation, and advances a game It has a sheet-like foot switch containing two or more step pilot switches which detect the existence pilot switch and the aforementioned step operation which are connected to the aforementioned game processor and detect the existence of the aforementioned player at least. The aforementioned game processor is dance game equipment characterized by performing mode determination processing in which game mode is determined according to the input from the aforementioned sheet-like foot switch.

[Claim 2] the aforementioned game processor -- the [the 1st and] -- it constitutes possible [connection of a 2 sheet-like foot switch] -- having -- the aforementioned game processor -- the [the above 1st and] -- the dance game equipment according to claim 1 which performs the aforementioned mode determination processing according to the input from a 2 sheet-like foot switch

[Claim 3] the aforementioned game processor -- the [the above 1st and] -- the dance game equipment according to claim 2 which recognizes the player number and displays selectable game mode on the aforementioned drop according to the aforementioned player number according to the input from each aforementioned existence pilot switch of a 2 sheet-like foot switch

[Claim 4] The aforementioned game processor is dance game equipment according to claim 3 which determines the aforementioned game mode according to the input from the aforementioned step pilot switch of the aforementioned 1st sheet-like foot switch from the aforementioned existence pilot switch of the aforementioned 2nd sheet-like foot switch when there is no input.

[Claim 5] the aforementioned game processor -- the [the above 1st and] -- the dance game equipment according to claim 3 which determines the aforementioned game mode according to the input from the aforementioned step pilot switch of the aforementioned 1st sheet-like foot switch or the aforementioned 2nd sheet-like foot switch when an input is received from the aforementioned existence pilot switch of a 2 sheet-like foot switch

[Claim 6] The aforementioned game processor is dance game equipment according to claim 3 to 5 which makes selection impotentia game mode only for two-person plays when the aforementioned player number is one person.

[Claim 7] It is dance game equipment according to claim 1 to 6 which the aforementioned game processor uses a selectable music name as a music selection screen based on the aforementioned music data, and is displayed on the aforementioned drop by storing beforehand a game program, image data, and music data in the aforementioned internal memory by having further the internal memory combined with the aforementioned game processor.

[Claim 8] It is dance game equipment according to claim 7 which it has further the memory cartridge inserted in the connector and the aforementioned connector which are connected to the aforementioned game processor, and additional image data and additional music data are beforehand stored in the aforementioned memory cartridge, and the aforementioned game processor uses a selectable music name as the aforementioned music selection screen based on the aforementioned music data and the aforementioned additional music data, and is displayed on the aforementioned drop.

[Claim 9] The aforementioned game processor is dance game equipment according to claim 1 to 8 which displays a profile selection screen on the aforementioned drop, determines the profile of the aforementioned player further according to the input from the step pilot switch of the aforementioned sheet-like foot switch, calculates a consumption calorie based on the profile of the aforementioned player, and is displayed on the aforementioned drop.

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DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Industrial Application] This invention relates to the dance game equipment

equipment which outputs the music corresponding to a guidance screen while displaying the guidance screen which guides step operation of a player especially, for example about dance game equipment, detects step operation, and runs a game.

[0002]

[Description of the Prior Art] An example of this conventional kind of dance game equipment is indicated by JP,2000-37490,A [A63B 69/00, A63B 71/06, A63F 9/00] by which application public presentation was carried out on February 8, Heisei 12.

This dance game equipment was installed in an amusement facility like a game center etc., and the player threw in coin and was enjoying the dance game. Moreover, an example of the dance game equipment for enjoying such a dance game at home is indicated by JP,2000-293292,A [G06F 3/02, A63B 69/00, A63F 13/00, H01H 13/16] by which application public presentation was carried out on October 20, Heisei 12.

This dance game equipment was connected to the home television receiver, and the player was enjoying the dance game easily.

[0003] With these dance game equipments, the number, game mode, music (music), etc. of a player were set up using the controller for a manual operation formed in the main part of dance game equipment, or the controller connected to the main part of dance game equipment (determination), and the controller (foot switch equipment) of the exclusive use for detecting step operation was used in the dance game.

[0004]

[Problem(s) to be Solved by the Invention] however, with such conventional technology, when the number, game mode, music (music), etc. of a player were chosen (determination), there was a case where the controller for a manual operation had to be used. Moreover, the number of an above-mentioned player etc. chooses only using foot switch equipment. (determination) When possible, the player needed to perform selection of the number of a player by operating foot switch equipment. That is, operation was troublesome.

[0005] So, the main purpose of this invention is offering the dance game equipment which can be operated easily.

[0006]

[Means for Solving the Problem] In the dance game equipment containing the game processor which this invention outputs the music corresponding to a guidance screen while displaying the guidance screen which guides step operation of a player on a drop, and detects step operation, and advances a game. It has a sheet-like foot switch containing two or more step pilot switches which detect the existence pilot switch and step operation which are connected to a game processor and detect the existence of a player at least. A game processor is dance game equipment characterized by performing mode determination processing in which game mode is determined according to the input from a sheet-like foot switch.

[0007]

[Function] This dance game equipment is connected to a drop (monitor) like a home television receiver, including a game processor like a high-speed processor. A

player's selection of music (music) outputs a corresponding play screen (guidance screen) and its music from a home television receiver. According to this, a player carries out step operation, this is detected by game equipment, and a dance game advances. With such dance game equipment, the foot switch (sheet-like foot switch) of the shape of a sheet containing two or more step pilot switches which detect the existence pilot switch and step operation which are connected to a game processor and detect the existence of a player at least (the shape of a mat) is formed. When choosing the number, a profile, game mode, music (music), etc. of a player at the time of a dance game start (determination), a sheet-like foot switch which was mentioned above is used. Therefore, a game processor can perform game mode determination processing in which the game mode according to the input of a sheet-like foot switch is determined.

[0008] for example, a game processor — the [the 1st and] — it constitutes possible [connection of a 2 sheet-like foot switch] — having — **** — the [the 1st and] — mode determination processing can be performed according to the input from either of the 2 sheet-like foot switches That is, game mode can be chosen (determination) and mode determination processing in which it was followed is performed by the player of one person or two persons.

[0009] moreover, a game processor — the [the 1st and] — the player number is recognized according to the input from the existence pilot switch which the 2 sheet-like foot switch was alike, respectively, and was prepared That is, the existence of a player is recognized in ON/OFF of an existence pilot switch. Therefore, selectable game mode can be displayed according to the player number.

[0010] Therefore, if the existence pilot switch of a 2nd sheet-like foot switch is OFF, it can judge that the 2nd player does not exist and game mode will be chosen according to the input from the step pilot switch of a 1st sheet-like foot switch.

[0011] moreover — if the existence pilot switch of a 2nd sheet-like foot switch is ON, the 2nd player exists — it can judge — the [a 1st sheet-like foot switch or] — game mode is chosen according to the input from the step pilot switch of a 2 sheet-like foot switch

[0012] For example, if a game processor recognizes it as the player number being one person, since it will make selection impotentia game mode of the game only for two-person plays, it does not choose the game mode of the game only for two-person plays accidentally.

[0013] Moreover, with game equipment, it has built-in memory like ROM combined with the game processor through the system bus etc., and the image data and music data for the game program of a dance game and a dance game are beforehand stored in this internal memory. A game processor displays a selectable music name as a music selection screen based on the music data stored in an internal memory. Therefore, it is, even if it prepares neither CD-ROM, DVD-ROM nor a memory cartridge separately, since desired music (music) can be chosen on a music selection screen and a dance game can be enjoyed, and a player is **.

[0014]. Furthermore, game equipment was inserted in the connector connected to a high-speed processor, and this connector, it has the memory cartridge with which game equipment is equipped, and additional image data and additional music data are beforehand stored in this memory cartridge. Thus, when it equips with a memory cartridge, based on the additional music data stored in the music data and the memory cartridge which were stored in the internal memory, a selectable music name is displayed as a music selection screen. Thus, a dance game can be extended, such as adding / changing the music of a dance game, when game equipment is equipped with a memory cartridge.

[0015] the profile selection screen for a game processor choosing the profile of a player further again — displaying — the [a 1st sheet-like foot switch or/, and] — the profile of a player is determined according to the input from the step pilot switch of a 2 sheet-like foot switch. In a dance game, since a game processor calculates a consumption calorie based on the determined profile and displays it on a drop, a player can know easily the calorie which enjoyed and consumed the dance game.

[0016]

[Effect of the Invention] Since the number of a player, a profile, game mode, music (music), etc. can be determined only using the sheet-like foot switch for inputting step operation etc. according to this invention, operation is easy.

[0017] The above-mentioned purpose of this invention, the other purposes, the feature, and an advantage will become still clearer from the detailed explanation of the following examples given with reference to a drawing.

[0018]

[Example] With reference to drawing 1, the dance game system (only henceforth a "system") 10 of this example contains dance game equipment (only henceforth "game equipment") 12. While power supply button 12a and reset button 12b are prepared in the upper surface side of a main part, infrared light sensing portion 12c is similarly prepared in this game equipment 12.

[0019] The 1st foot switch 14 for the 1st player (controller) formed in the shape of a mat (the shape of a sheet) is connected to game equipment 12 in one. The 1st controller 14 includes the field (step region) which the field (home position) and player a player stands first choose a profile, game mode, and music, or inputs operation (step operation) into a game. A home position is arranged in the center of a simultaneously of the 1st controller 14, and four step regions are arranged approximately [the] (upper and lower sides) at right and left so that drawing 1 may show.

[0020] Moreover, corresponding to each of a home position and a step region, Switches 14a-14e are formed. Switches 14a-14e are formed in order to mainly detect the existence of a player, and step operation. The composition of the switch in this example is the same as that of the internal configuration of the sheet-like foot switch currently indicated by JP,2000-293292,A [G06F 3/02, G63B 69/00, A63F 13/00, H01H 13/16] by which this applicant applied previously and application

public presentation was already carried out. It is the switch equipped with the spacer which has two or more stomata and it will be formed in the shape of [of predetermined thickness] sponge although illustration is omitted if the composition is explained briefly, and two electrodes which separated this spacer and have been arranged in parallel and in which elastic deformation is possible. Two electrodes will contact in the portion of the stoma of a spacer, and this switch will be in an ON state, if electrodes are isolated by the spacer at the time of peace when a player does not exist, it is an OFF state, a player steps on a step and an electrode and a spacer deform.

[0021] However, in this example, switch 14a is prepared also in a home position as switch composition given [above-mentioned] in an official report, and a big difference. When the player is located on switch 14a prepared in the home position by this (it exists), switch 14a can be in an ON state, for example, it can recognize whether the player exists by the technique mentioned later, and the contents of a dance game etc. can be changed automatically. Moreover, not only switch 14a prepared in the home position but the thing for which other switches 14b-14e are used as a means for recognizing existence of a player is possible.

[0022] In addition, drawing 1 is used and shown [reference number / same] in the home position and the step region, and the switch, in order to show intelligibly.

[0023] Moreover, printing whose player it swerves and can recognize easily the switches 14a-14e of ** is given to each of a home position and a step region so that drawing 1 may show. For example, a round mark is printed and, as for a home position, an vertical and horizontal arrow mark is printed by the step region.

Therefore, Switches 14a-14e are carried out to 1st player recognition switch 14a, 1st top switch 14b, 1st bottom switch 14c, and reaching 1st left switch 14d and writing it as 1st right switch 14e, in order to make it intelligible, respectively.

[0024] A system 10 contains the 1st controller 14 and the 2nd controller 16 for the 2nd player formed similarly again. the 2nd controller 16 — again — a home position and a step region — containing — respectively — alike — corresponding — the [2nd player recognition switch 16a, 2nd top switch 16b, 2nd bottom switch 16c, and 2nd left switch 16d and] — 2 right switch 16e is prepared This 2nd controller 16 is detached and attached by game equipment 12 if needed, and is connected using 16f of interconnection cables.

[0025] In addition, as such 1st controller 14 and the 2nd controller 16, the foot switch equipment currently indicated by not only a switch part but the above-mentioned official report can be used.

[0026] Game equipment 12 contains the removable memory cartridge 22 in game equipment 12 main part, including the home television receiver (only henceforth "television") 20 to which a system 10 is further connected using the AV cable 18.

[0027] The composition of such a system 10 is shown like drawing 2 . As shown in drawing 2 , although game equipment 12 can use the processor of arbitrary kinds as this high-speed processor 30 including the high-speed processor 30, in this example,

the high-speed processor (tradename "Xavix") which this applicant develops and has already carried out patent application is used. This high-speed processor is indicated in detail by the U.S. patent 09th corresponding to JP,10-307790,A [G06F13/36, G06F 15/78] and this / No. 019 or 277.

[0028] Although the high-speed processor 30 omits illustration further including CPU30a, it includes the input/output control circuit which receives an input signal like manipulate signals, such as a key stroke signal, or an infrared signal, and gives an output signal to an external instrument while it contains various processors, such as a graphic processor, a sound processor, and a DMA processor. CPU30a performs a required operation according to an input signal, and gives the result to other graphic processors, sound processors, etc. Therefore, a graphic processor and a sound processor perform the image processing and speech processing according to the result of an operation.

[0029] The system bus 32 is connected to this high-speed processor 30, and the memory cartridge (exterior ROM) ROM 36 contained in the main part built-in ROM 34 prepared in the substrate (not shown) contained by the 12 game equipment inside-of-the-body section with the high-speed processor 30 and a memory cartridge 22 is combined with a system bus 32. Therefore, the high-speed processor 30 can access these ROM34 and ROM36 through a system bus 32, and can take out image data, music data (score data for a musical instrument performance), etc. from there. That is, a graphic processor performs image processing to the image data read from ROM34 or ROM36, and a sound processor performs speech processing to the music data read from ROM34 or ROM36.

[0030] However, the memory cartridge connector (only henceforth a "cartridge connector") 38 is formed in game equipment 12, and the exterior ROM 36 is combined with a system bus 32 by equipping this cartridge connector 38 with a memory cartridge 22 so that drawing 2 may show.

[0031] Moreover, the direct file of the 1st controller 14 mentioned above is carried out to the input port of the high-speed processor 30, and the 2nd controller 16 is connected to the input port of the high-speed processor 30 through 16f of interconnection cables, and the connector 40 for controllers. Similarly, reset button 12b mentioned above is also connected to the input port of the high-speed processor 30.

[0032] In addition, in drawing 2, the 1st controller 14 and the 2nd controller 16 are small illustrated on account of the drawing.

[0033] Moreover, power supply button 12a shown by drawing 1 is connected to the power circuit which is not illustrated, and it responds to operation of power supply button 12a, and a power circuit is turned on or turned off, and a power supply is supplied or stopped by each component built in game equipment 12 main part.

[0034] Furthermore, although omitted in drawing 1, although a system 10 omits the detailed composition of the heartbeat sensor 24 including the heartbeat sensor unit 24, the wrist and ear of a player are equipped with the heartbeat sensor 24, and it

detects the pulse of a player, for example. And the data corresponding to the detected pulse are changed into an infrared signal, and it is given to infrared light sensing portion (infrared light-receiving module) 12c prepared in game equipment 12. This infrared light-receiving module 12c is connected to the input port of the high-speed processor 30.

[0035] Therefore, in the high-speed processor 30, in response to the input signal from reset button 12b, infrared light-receiving module 12c, the 1st controller 14, and the 2nd controller 16, CPU30a performs required data processing, and a graphic processor and a sound processor perform image processing and speech processing according to the result of an operation, respectively.

[0036] The analog video signal which is the result of carrying out image processing by the graphic processor is outputted from image output terminal 42a, and is inputted into television 20 through the AV cable 18 shown by drawing 1. Moreover, the analog sound signal which is the result of carrying out speech processing by the sound processor is outputted from voice output terminal 42b, and is inputted into television 20 through the AV cable 18 like an analog video signal.

[0037] With reference to drawing 3, the main part built-in ROM 34, the program in the exterior ROM 36, and the storing state of data are explained. Game program 34a, image data 34b, and music data 34c are stored in ROM34 (storage).

[0038] If electric power switch 12a is turned on in the state where game equipment 12 is not equipped with the memory cartridge 22 or reset button 12b is turned on, game program 34a will be started and processing of system initialization, sequence control, game rule control, image display control, music reproduction control, etc. will be performed. Image data 34b consists of title screen data, a profile / game mode selection screen data, music selection screen data, video data (an arrow mark, life gauge, etc.), and game background-image data. Music data 34c consists of score data (arrow mark appearance pattern data are included.) and source data of fundamental tone.

[0039] Moreover, additional game program 36a, additional image data 36b, and additional music data 36c are memorized by ROM36. Where game equipment 12 is equipped with a memory cartridge 22, if power supply button 12a is turned on or reset button 12b is turned on, additional game program 36a will be started and processing of system initialization, sequence control, game rule control, image display control, music reproduction control, etc. will be performed. Additional image data 36b consists of music selection screen data and additional game background screen data. Additional music data 36c consists of score data (arrow mark appearance pattern data are included.) and additional sound-source data.

[0040] However, ROM34 memorizes and the title screen data used in common with a dance game, a profile / game mode selection screen data, a video data, and the source data of fundamental tone are used also in additional game program 36a during starting.

[0041] The configuration of a memory cartridge 22 and the cartridge connector 38 is

shown in drawing 5 and drawing 6. Substrate 22b fixes to inferior-surface-of-tongue side housing 22a of a memory cartridge 22, and two or more cartridge side edge children 22c and 22c and — are formed in the front face of substrate 22b over the width-of-face (straight side) direction. Among these, it connects mutually and two cartridge side edge children 221c and 222c located in crosswise one side one end of substrate 22b form a switch SW1.

[0042] On the other hand, oblong insertion section 38a for inserting the nose of cam of bottom housing 22a and substrate 22b in the cartridge connector 38 is formed, and two or more connector side edge children 38b and 38b and — are formed over the width-of-face (straight side) direction inside insertion section 38a. Each connector side edge child 38b is stuck to top housing 38c in the proper position of the length direction, and is being fixed in this position so that drawing 5 may show. Connector terminal 38b is crooked toward insertion section 38a from top housing 38c, and is again crooked toward top housing 38c. Two or more rectangle-like openings are formed above insertion section 38a over the cross direction, and the one side edge of each connector side edge child 38b is exposed from these openings.

[0043] The piece of a metal is prepared in the proper position of the center of the cross direction so that two openings may be straddled, and this piece of a metal makes a switch SW2. Two connector side edge children 383b and 384b who expose from these two openings are electrically connected by this switch SW2, when external force is not given.

[0044] If the point of inferior-surface-of-tongue side housing 22a and substrate 22b is inserted in insertion section 38a, each connector side edge child 38b will be raised by bottom housing 22a and substrate 22b, and will contact each cartridge side edge child 22c on substrate 22b. The connector side edge children 381b and 382b contact a switch SW1, and the connector side edge children 381b and 382b short-circuit them by this. On the other hand, the connector side edge children 383b and 384b separate from a switch SW2, and the connector side edge children 383b and 384b are wide opened by this.

[0045] In addition, although the cartridge side edge children 223c and 224c contact the connector side edge children 383b and 384b, the cartridge side edge children 223c and 224c are wide opened by each, and the connector side edge children 383b and 384b do not short-circuit them.

[0046] With reference to drawing 7 and drawing 8, OE output port of the high-speed processor 30 is connected with the main part built-in ROM 34 and OE input port (at the time of cartridge wearing) of the exterior ROM 36, CE1 output port of the high-speed processor 30 is connected with connector side edge child 383b and CE input port (at the time of cartridge wearing) of the exterior ROM 58, and CE2 output port of the high-speed processor 30 is connected with connector side edge child 381b. On the other hand, CE input port with a main part built-in [ROM / 56] is connected with the connector side edge children 382b and 384b. Moreover, the high-speed processor 30, the main part built-in ROM 34, and the exterior ROM 36

are mutually connected for a system bus 32 including address bus 32a and data bus 32b by no less than these two bus 32a and 32b.

[0047] The high-speed processor 30 outputs the chip enable signal 1 or the chip enable signal 2 from CE1 output port or CE2 output port, and outputs an address signal through address bus 32a, and outputs an output enable signal from OE output port. When the chip enable signal 1 or the chip enable signal 2 is inputted from CE input port, the main part built-in ROM 34 and the exterior ROM 36 recognize it as he having been chosen as an access place, answer the address signal and output enable signal which were inputted almost simultaneously with this, and output a data signal, respectively. A data signal is given to the high-speed processor 30 through data bus 32b.

[0048] The chip enable signal 1 and the chip enable signal 2 are outputted corresponding to a mutually different address value. That is, with reference to drawing 9, the address value of 8 bits of high orders shows either of "00" - "3F", and when [of "FFFF" - "8000"] either is shown, when [of "80" - "BF"] either is shown, the chip enable signal 1 is outputted [the address value of 16 bits of low ranks] for the address value of 8 bits of high orders. On the other hand, the address value of 8 bits of high orders shows either of "60" - "7F", and when [of "FFFF" - "8000"] either is shown, when [of "E0" - "FF"] either is shown, the chip enable signal 2 is outputted [the address value of 16 bits of low ranks] for the address value of 8 bits of high orders.

[0049] When not equipped with the memory cartridge 22, the connector side edge children 383b and 384b will be in a short circuit state with a switch SW2, and the connector side edge children 381b and 382b will be in an open state. Then, the chip enable signal 1 is inputted into CE input port with a main part built-in [ROM / 34], and the chip enable signal 2 is inputted into neither of the ports. Since the high-speed processor 30 outputs the chip enable signal 1 and the chip enable signal 2 in an above-mentioned way, game program 34a read from the main part built-in ROM 34, image data 34b, and music data 34c (refer to drawing 3) are mapped as shown in drawing 10:

[0050] That is, all of game program 34a, image data 34b, and music data 34c are mapped by the address space with which game program 34a is mapped by the address space 8 bits of high orders indicate "00" - "1F" to be, and 16 bits of low ranks indicate "FFFF" - "8000" to be, and 8 bits of high orders indicate "80" - "9F" to be, and 16 bits of low ranks indicate "FFFF" - "0000" to be. The high-speed processor 30 performs game program 56a first, when a power supply is switched on in the state where 8 bits of high orders are not equipped with the memory cartridge 22 in order [of "00"] to start access from the address.

[0051] If equipped with a memory cartridge 22, the connector side edge children 383b and 384b will be in an open state, and the connector side edge children 381b and 382b will be in a short circuit state with a switch SW2. At this time, the chip enable signal 2 is inputted into CE input port with a main part built-in [ROM / 34],

and the chip enable signal 1 is inputted into CE input port of the exterior ROM 36. Game program 34a read from the main part built-in ROM 34, image data 34b and music data 34c, game program 36a read from the exterior ROM 36 to a row, additional image data 36b, and additional music data 36c are mapped as shown in drawing 11.

[0052] 8 bits of that is, high orders — " — 60" — "7F" — being shown — 16 bits of and low ranks — " — game program 34a maps in the address space which shows "FFFF" — "8000" — having — 8 bits of high orders — " — E0" — "FF" — being shown — 16 bits of and low ranks — "FFFF" — game program 34a which shows — "0000", image data 34b, and music data 34c are mapped. Moreover, game program 36a, additional image data 36b, and additional music data 36c are mapped by the address space with which game program 36a is mapped by the address space 8 bits of high orders indicate "00" — "3F" to be, and 16 bits of low ranks indicate "FFFF" — "8000" to be, and 8 bits of high orders indicate "80" — "BF" to be, and 16 bits of low ranks indicate "FFFF" — "0000" to be. The high-speed processor 30 performs game program 36a first, when a power supply is switched on in the state where 8 bits of high orders were equipped with the memory cartridge 22 in order [of "00"] to start access from the address.

[0053] Thus, since it was made to change the mapping state of the address space seen from the high-speed processor 30 in the time of being equipped with the time of not being equipped with the memory cartridge 22, according to the attachment-and-detachment state of a memory cartridge 22, each program memorized to the main part built-in ROM 34 and the exterior ROM 36 can be started appropriately.

[0054] Moreover, if the data memorized by the main part built-in ROM 34, the updating program of a program, or a correction program is prepared for the exterior ROM 36, by wearing of a memory cartridge 22, this updating program or a correction program is performed, and an output image or output voice can be changed.

[0055] For example, with such game equipment 12, when CPU30a contained in the high-speed processor 30 processes the flow view shown in drawing 12 — drawing 16, a dance game is performed. If power supply button 12a of game equipment 12 is turned on, or reset button 12b is turned on where a power supply is turned on, CPU30a starts processing, it is Step S1, and it will perform system initialization processing while it starts a game program. At this time, as mentioned above, according to whether game equipment 12 is equipped with the memory cartridge 22, game program 34a or additional game program 36a is started.

[0056] A title screen as shown in drawing 17 is expressed to screen 20a of television 20 as continuing Step S3. Specifically, after CPU30a reads title screen data from image data 34b memorized by ROM34 and performs image processing using a graphic processor, it is outputted to television 20 from image output terminal 42a.

[0057] Hereafter, in displaying various screens, except that the screen data to be used differ, since same processing is performed, it will not explain in detail each time.

[0058] As shown in drawing 17, the character which shows the switch of the controller which should be operated since a dance game is gone on while the title of a dance game is displayed to a game title screen is displayed. In this example, an arrow mark "→" is displayed so that drawing 17 may show. therefore, a player — a title screen — following — the [1st right switch 14e or] — that is [it carries out], a game can be advanced by [which step on 2 right switch 16e (step)] turning on [0059] that is, the step S5 — setting — CPU30a — the [1st right switch 14e or] — 2 right switch 16e judges whether it is ON If it is "NO" at Step S5, and it is got blocked, it right [1st] switch 14e Reaches and both 2nd right switch 16e is not turned on, it returns to the same step S5. If it will be got blocked and it will right [1st] switch 14e Reach on the other hand, if it is "YES" at Step S5, and either of the 2nd right switch 16e is turned on, a profile selection screen as shown in drawing 18 at Step S7 will be displayed on screen 20a.

[0060] With reference to drawing 18, the item for choosing sex, age, and weight (profile) is displayed on a profile selection screen. Moreover, the character (cursor) which shows the 1st player "1P" and the 2nd player "2P" possible [movement of on each item of the profile] is displayed. Furthermore, the arrow mark "**" and "***" which show the switch of the controller which should be operated in order to move the cursor up and down are displayed on the lower part of a profile selection screen. The determination of a profile, and in order to cancel (it returns), the arrow mark "→" and "←" which show the switch of the controller which should be operated are displayed further again.

[0061] For example, the cursor of 1P can be moved to a desired item by operating 1st top switch 14b and switch-under the ** 1st 14c. Moreover, the cursor of 2P can be moved to a desired item by operating 2nd top switch 16b and switch-under the ** 2nd 16c.

[0062] Both the 1st player and the 2nd player can perform selection of a profile. specifically, the cursor of 1P or 2P moves to a desired item — having — the [1st right switch 14e or] — ON of 2 right switch 16e determines the profile of the 1st player or the 2nd player as the profile which the cursor of 1P or 2P shows however, a profile selection screen — setting — the [1st left switch 14d or] — if 2 left switch 16d is turned on, it will return to the title screen mentioned above

[0063] In addition, when the 1st player and the 2nd player operate it simultaneously at the time of selection of a profile, CPU30a gives priority to the input signal from 1st controller 14a, and disregards the input signal from the 2nd controller 16.

[0064] Moreover, since there is no input signal from the 2nd controller 16 when the 2nd player does not exist, CPU30a can recognize that only the profile of the 1st player was chosen.

[0065] That is, CPU30a will perform move processing of cursor by continuing step S9, if a profile selection screen is expressed as Step S7. As mentioned above, corresponding to operation of the 1st player and the 2nd player, the cursor of 1P and 2P is moved up and down.

[0066] In addition, in this example, since the same is said of the move processing of cursor mentioned later, explaining in detail each time will omit.

[0067] then — Step S11 — the [1st left switch 14d or] — 2 left switch 16d judges whether it is ON That is, it judges whether the player chose "it returns." if it is "YES" at Step S11 — the [that is,,] — the [1 left switch 14d and] — if 2 left switch 16d one side is turned on, it will judge that it chose "it returns", it will return to Step S3, and a title screen will be displayed

[0068] On the other hand, if it is "NO" at Step S11, and it is got blocked, it reaches 1st left switch 14d and 2nd left switch 16d both are not turned on, it judges whether 1st right switch 14e was turned on at Step S13. If it is "NO" at Step S13, and it is got blocked and 1st right switch 14e is not turned on, it progresses to Step S15. If it will be got blocked on the other hand if it is "YES" at Step S13, and 1st right switch 14e is turned on, after performing content change of profile / check processing of the 1st player at Step S17, it will return to Step S7.

[0069] At Step S15, it judges whether 2nd right switch 16e was turned on. If it is "NO" at Step S15, and it is got blocked and 2nd right switch 16e is not turned on, it progresses to Step S21 shown in drawing 13 . If it will be got blocked on the other hand if it is "YES" at Step S15, and 2nd right switch 16e is turned on, after performing content change of profile / check processing of the 2nd player at Step S19, it will return to Step S7.

[0070] Here, explanation of content change of profile / check processing of the 1st player displays content change of profile / check screen as shown in drawing 19 on screen 20a in Step S17. The data of the screen (screen in which the profile is not entered) used as this default are memorized with the profile / game mode selection screen data contained in image data 34b, although omitted in ROM34.

[0071] In this content change of profile / check screen, the profile which the player chose on the profile selection screen mentioned above (determination) is displayed. Moreover, the arrow mark "<" of the switch which should be operated when changing / checking the content of the profile which the player determined (decision), and ">" are displayed on the lower part of content change of profile / check screen.

[0072] Therefore, when the content of a profile is right (i.e., when a check is O.K.), a player (the 1st player) turns on 1st right switch 14e, and decides a profile. On the other hand, in changing the content of a profile, it turns on 1st left switch 14d. Then, the profile selection screen shown by drawing 18 is displayed, and a profile can be chosen again.

[0073] In addition, since the same content change check screen of a profile as the case of the 1st player (the profile which the 2nd player chose is included.) is displayed and content change of profile / check processing of the 2nd player can be operated similarly, the duplicate explanation is omitted.

[0074] With reference to drawing 13 , 2nd player recognition switch 16a judges whether it is ON at Step S21. That is, it judges whether the 2nd player exists. If it is

"YES" at Step S21, it will be got blocked, and if 2nd player recognition switch 16a is ON, it will judge that the 2nd player exists and will progress to Step S49 shown in drawing 15.

[0075] On the other hand, if it is "NO" at Step S21, it will be got blocked, and if 2nd player recognition switch 16a is off, it will judge that the 2nd player does not exist and game mode only for two-person plays will be impotentia-ized at Step S23. That is, the flag of the dance game only for two-person plays in a game program or an additional game program is turned off.

[0076] Thus, game mode is determined according to ON/OFF of 2nd player recognition switch 16a.

[0077] Then, the game mode selection screen for an one-person play as shown in drawing 20 is expressed as Step S25. The item which shows the game mode which can be played by one person or two persons is displayed on this one-person play game mode selection screen. Moreover, the arrow mark "**" which shows the switch operated like a profile selection screen in order to direct selection in game mode, determination, and cancellation (it returns) (ON), "**", "<", ">", etc. are displayed on the screen lower part.

[0078] In addition, the item (this example "***** mode" item) of the game only for two-person plays is not expressed as an one-person play game mode selection screen. That is, on an one-person play game mode selection screen, the item of the game only for two-person plays is made into selection impotentia. However, the item of the game only for two-person plays is displayed in a thin color compared with other items, and you may prevent from moving cursor to the item in an one-person play game mode selection screen.

[0079] A player's operation of 1st top switch 14b or switch-under the ** 1st 14c moves **** (cursor) of the same size as the frame surrounding an item up and down. And if a desired item is chosen and 1st right switch 14e is turned on, it will be decided that it will be the game mode which cursor shows. However, if 1st left switch 14d is turned on, it will return to the title screen mentioned above.

[0080] In addition, if 1st left switch 14e is turned on, although it is made to return to a title screen in an one-person play game mode selection screen in this example, you may make it return to a profile selection screen.

[0081] That is, if CPU30a expresses an one-person play game mode selection screen as Step S25, cursor advance processing will be performed at Step S27, and 1st left switch 14d will judge whether it is ON at Step S29. If it is "YES" at Step S29, it will be got blocked, and if 1st left switch 14d is turned on, it will judge that "it returns" was chosen and will return to Step S3 shown in drawing 12. On the other hand, if it is "NO" at Step S29, and it is got blocked and 1st left switch 14d is not turned on, it judges whether 1st right switch 14e was turned on at Step S31.

[0082] If it is "NO" at Step S31, and it is got blocked and 1st right switch 14e is not turned on, it returns to Step S25 as it is. On the other hand, if it is "YES" at Step S31, it will be got blocked, and if 1st right switch 14e is turned on, it will judge that

game mode was chosen and a music selection screen as shown in drawing 21 at Step S33 will be displayed on screen 20a.

[0083] In addition, the data (music selection screen data) corresponding to a music selection screen When ROM34 and ROM36 memorize and it is not equipped with the memory cartridge 22 When the music selection screen data of image data 34b memorized by ROM34 are read and it is equipped with the memory cartridge 22 Both music selection screen data of additional image data 36b memorized by the music selection screen data and ROM36 which are memorized by ROM34 are read.

[0084] With reference to drawing 21, a list indication of the item containing names, such as a singer who performs or sings the music name which dances, and its music to a music selection screen, is given. Moreover, a footprint mark is displayed on the lower right portion of each item, and difficulty is expressed by this footprint mark. Therefore, since difficulty is changeable even if it is the same music, as shown in drawing 21, the item from which difficulty differs with the same music is prepared. Moreover, an arrow mark "**", "**", "<-", "->", etc. of the switch operated like a profile selection screen etc. in order to direct selection of music, determination, and cancellation (it returns) are displayed on the lower part of a music selection screen.

[0085] In addition, difficulty expresses the bird clapper with this example highly as the number of footprint marks increases. For example, it is possible to increase the number of steps of a player or to display the arrow mark (to refer to drawing 22) of the white later mentioned so that it may become a difficult step as a method of making difficulty high.

[0086] A player chooses an item based on music and two elements of difficulty. Specifically, **** (cursor) of the same size as the frame surrounding each item is moved up and down by turning on 1st top switch 14b or switch-under the ** 1st 14c. And if desired music and the item of difficulty are chosen and 1st right switch 14e is turned on, it can be decided that it will be the item (music) which cursor shows.

[0087] In addition, since many music is prepared also besides being displayed on the music selection screen of drawing 21, it is also possible by turning on 1st top switch 14b or switch-under the ** 1st 14c to scroll a screen (a roll-up or roll-down), and to choose the music except having been shown in drawing 21.

[0088] That is, CPU30a will judge whether cursor advance processing was performed at Step S35, and 1st left switch 14d was turned on at Step S37, if a music selection screen is expressed as Step S33. If it is "YES" at Step S37, it will be got blocked, and if 1st left switch 14d is turned on, it will judge that "it returns" was chosen and will return to Step S25 as it is. On the other hand, if it is "NO" at Step S37, and it is got blocked and 1st left switch 14d is not turned on, 1st right switch 14e judges whether it is ON at Step S39 shown in drawing 14.

[0089] If it is "NO" at Step S39, and it is got blocked and 1st right switch 14e is not turned on, it returns to Step S33 shown by drawing 13. On the other hand, if it is "YES" at Step S39, it will be got blocked, and if 1st right switch 14e is turned on, it

will judge that music was chosen and the game for an one-person play will be performed with the game mode, music, and difficulty which were chosen at Step S41.

[0090] For example, the game program corresponding to the game mode, music, and difficulty which were chosen by the player (determination) is started, and sequence control, game rule control, image display control, and music reproduction control are performed according to them. Moreover, the video datas (an arrow mark, life gage, etc.) corresponding to the game mode, music, and difficulty which were determined, a game background screen, score data (arrow mark appearance pattern data are included.), and the source data of fundamental tone are read from ROM34.

[0091] However, game equipment 12 is equipped with a memory cartridge 22, and when additional program 36a memorized by ROM36 is started, an additional game background screen, score data, and additional sound-source data are read from ROM36.

[0092] Game screen for an one-person play as shown in drawing 22 in one-person play game mode (1P play screen) It is displayed on screen 20a. The game screen for the 1st player is expressed as 1P play screen. On this game screen, the arrow mark (white arrow mark) displayed in white scrolls to lower shell facing up, and when a white arrow mark arrives at the step position where the arrow mark by which it was smeared away black is displayed, a player switches [14b-14e] off the 1st controller 14 corresponding to the white arrow mark. Moreover, the item (a music name and difficulty) determined on the music selection screen is displayed on the lower part of 1P play screen.

[0093] In addition, although illustration is omitted, a background image is also displayed on a game screen and the other field.

[0094] While such a 1P play screen is displayed, the music (music) which the player chose is outputted from the loudspeaker (not shown) of television 20. Specifically, as drawing 2 showed, CPU30a reads the score data and the source data of fundamental tone (and additional sound-source data) corresponding to the music (music) which the player chose from music data 34c/additional music data 36c, performs speech processing by the sound processor, and outputs it to television 20 from voice output terminal 42b. Moreover, as shown in drawing 3 and drawing 4, the appearance pattern of a white arrow mark shown in drawing 22 etc. is contained in the score data stored in ROM34 and ROM36, and the display of a white arrow mark etc. is controlled according to this appearance pattern. That is, CPU30a reads the game background screen data / additional background screen data memorized by the ROM34/ROM36 [same] as ROM34/ROM36 which have read the score data corresponding to the music which the video data and player which are memorized by ROM34 chose, performs image processing according to the appearance pattern contained in score data by the graphic processor, and outputs it to television 20 from image output terminal 42a.

[0095] Therefore, the music which the player chose (determination), and 1P play screen corresponding to the music are outputted from television 20, step operation

of a player is guided, and a dance game advances.

[0096] Moreover, as shown in drawing 22, a life gage and the number of consumption calories are displayed on the game screen of 1P play screen. The life gage is divided into two or more segments, and when a white arrow mark arrives at a step position, according to the ability of the player to have turned on the exact switches 14b-14e with sufficient timing, the segment of one or two predetermined numbers or more is fluctuated. However, the number which fluctuates a life gage may be made fixation and may be made to carry out adjustable according to difficulty.

[0097] A consumption calorie is fundamentally calculated according to the momentum of a player. That is, a simple momentum can be known if it counts by the counter which does not illustrate the number of times which turned on, the numbers of steps 14b-14e, i.e., the switches, of a player. Therefore, regardless of the accuracy of step operation, momentum is measurable. Furthermore, a near consumption calorie is computable by considering a profile (sex, age, and weight) and adjusting the augend of a consumption calorie. That is, if the table of the calorie corresponding to counted value (momentum) and the table of the augend of a calorie according to the profile are prepared beforehand, a consumption calorie can be computed and displayed easily. For example, when it is a player with comparatively heavy weight, the augend of a consumption calorie is enlarged.

[0098] Thus, a game advances, and a game is completed, when the performance of music is completed according to game mode, or when a life gage is set to 0. A game is ended, after not becoming a game end even if a life gage is set to 0 but specifically completing the performance of music, if game mode is the "*****-mode." Moreover, a game will be ended, if game modes are "***** and **** my mode", and "papa mama mode" and a life gage will be set to 0.

[0099] In addition, in a game, if the player equips the body (for example, a wrist and an ear) with the heartbeat sensor unit 24, the heart rate of a player is detectable. Therefore, when a heart rate becomes large unusually, controlling advance of a game on the way can also make tempo of music late.

[0100] Moreover, although the music of 1 chosen in the music selection screen is performed in the "*****-mode" and "***** and **** my mode" in this example, two or more music is continuously reproduced in "papa mama mode." Therefore, what is necessary is to choose two or more music, or just to choose from two or more courses determined beforehand in a music selection screen which was mentioned above, although illustration is omitted, when "papa mama mode" is chosen.

[0101] CPU30a will judge whether it is a game end at continuing Step S43, if the game for an one-person play is performed at Step S41. If the performance of music will finish or a life gage will not be set to 0 if it is "NO" at Step S43 that is, it judges that it is not a game end and returns to Step S41.

[0102] On the other hand, if the performance of music will finish or a life gage will be

set to 0 if it is "YES" at Step S43 that is, it will be judged as a game end and will progress to Step S45. Although illustration is omitted, it expresses a screen as Step S45 a result for an one-person play. The result for an one-person play, except that the arrow mark "→" a screen indicates the switch which a white arrow mark is not displayed but should be operated in the screen lower part for game advance to be displayed, it is the same as 1P play screen, and a life gage and a consumption calorie are fixed for the memory and the numeric value at the game end time.

[0103] And the 1st right switch judges whether it is ON at Step S47. If it is "NO" at Step S47, and it is got blocked and the 1st right switch is not turned on, it returns to the same step S47. On the other hand, if it is "YES" at Step S47, it will be got blocked, and if 1st right switch 14e is turned on, it will return to Step S33 shown by drawing 13.

[0104] As shown in drawing 15, at Step S49, game mode only for two-person plays is activity-ized. That is, the flag of the game only for two-person plays in the sequence of a game program is turned on. The game mode selection screen for a two-person play as shown in drawing 23 is expressed as continuing Step S51.

Similarly [except that the item in the game mode only for two person plays was added (made selectable)] to the game mode selection screen for an one-person play shown by drawing 20, since the same is said of an operating instruction, this game mode selection screen for a two-person play omits the duplicate explanation.

[0105] that is, — if CPU30a expresses the game mode selection screen for a two-person play as Step S51 — Step S51 — cursor advance processing — performing — Step S55 — the [1st left switch 14d or] — it judges whether 2 left switch 16d was turned on

[0106] In addition, in cursor advance processing, CPU30a moves cursor up and down according to the input signal from both the 1st controller 14 and the 2nd controller 16. However, when there is an input signal simultaneously from both the 1st controller 14 and the 2nd controller 16, priority is given to the input signal from the 1st controller 14, and cursor is moved according to this. Hereafter, about the case where it is simultaneously operational by the 1st controller 14 and the 2nd controller 16, it is the same.

[0107] if it is "YES" at Step S55 — the [that is,,] — the [1 left switch 14d or] — if 2 left switch 16d is turned on, it will return to Step S3 shown in drawing 12 if it is "NO" at Step S55 on the other hand — the [that is,,] — the [1 left switch 14d and] — if 2 left switch 16d either is turned on — Step S57 — the [1st right switch 14e or] — 2 right switch 16e judges whether it is ON

[0108] If it is "NO" at Step S57, and it is got blocked, it right [1st] switch 14e Reaches and both 2nd right switch 16e is not turned on, it returns to Step S51. If it will be got blocked and it will right [1st] switch 14e Reach on the other hand, if it is "YES" at Step S57, and either of the 2nd right switch 16e is turned on, a music selection screen as shown by drawing 21 at Step S59 will be displayed.

[0109] In addition, in Step S59, since it is the same as the operation of music

selection mentioned above except the ability to perform operation for two persons' player choosing music, the duplicate explanation is omitted.

[0110] that is, — if CPU30a expresses a music selection screen as Step S59 — Step S61 — cursor advance processing — performing — Step S63 — the [1st left switch 14d or] — 2 left switch 16d judges whether it is ON

[0111] If it will be got blocked and it will reach 1st left switch 14d, if it is "YES" at Step S63, and 2nd left switch 16d either is turned on, it will return to Step S51. On the other hand, if it is "NO" at Step S63, and it is got blocked, it reaches 1st left switch 14d and 2nd left switch 16d both are not turned on, it progresses to Step S65 shown in drawing 16 .

[0112] Step S65 — the [1st right switch 14e or] — 2 right switch 16e judges whether it is ON If it is "NO" at Step S65, and it is got blocked, it right [1st] switch 14e Reaches and both 2nd right switch 16e is not turned on, it judges that music is not chosen and returns to Step S59. if it is "YES" at Step S65 on the other hand — the [that is,,] — the [1 right switch 14e and] — if either of the 2 right switch 16e is turned on, it will judge that music was chosen and the game for a two-person play will be performed with the game mode, music, and difficulty which were chosen at Step S67

[0113] A start of the game for 2 plays displays the play screen for a two-person play (2P play screen) as shown in drawing 24 on screen 20a. The game screen for the object for the 1st player and the 2nd player is expressed to screen 20a of television 20 as this 2P play screen. However, only one item which shows a music name and difficulty is displayed on the screen lower part like 1P play screen.

[0114] For example, two persons will run simultaneously a game for an one-person play in in the "*****-mode", "***** and **** my mode", or "papa mama mode" which was mentioned above in game mode. Moreover, if it is "***** mode", it is possible to make it game expansion against which the 1st player and the 2nd player play a match.

[0115] That is, if timing can improve a step when [in in the "*****-mode", "***** and **** my mode", or "papa mama mode"] a white arrow mark reaches into a game in a step position, although it is made for a life gage to increase in game mode, in "***** mode", a waging-war partner's life gage can be decreased. Moreover, although illustration is omitted, a partner's play can be blocked, if a different arrow mark (arrow mark for an attack) of a color or a configuration from a white arrow mark is displayed and timing can improve the arrow mark for an attack a step in a step position. For example, two or more kinds of arrow marks for an attack are prepared, and a mask can be covered over some game screens of a partner player, or they can make quick traverse speed (scroll rate), such as a white arrow mark of a partner player.

[0116] Thus, the dance game in each game mode advances, and CPU30a judges whether it is a game end at Step S69. That is, it judges whether the performance of music was completed or the life gage of one of players was set to 0. If the

performance of music is not completed and the life gage of both players is not 0 if it is "NO" at Step S69 that is, it will judge that it is not a game end, it will return to Step S67, and will continue a dance game. On the other hand, if it is "YES" at Step S69 (i.e., if the performance of music is completed or the life gage of one of players is set to 0), although it will be judged as a game end and illustration will be omitted at Step S71, a screen is displayed a result for a two-person play.

[0117] The white arrow mark which that of a screen is [for a two person play] almost the same as that of 2P play screen a result, and was displayed during the play is not displayed, but the arrow mark "->" of the switch which should be operated since a game is gone on in the screen lower part is displayed. Moreover, it is fixed while it has been a life gage and a consumption calorie at the game end time.

[0118] therefore — Step S73 — the [1st right switch 14e or] — 2 right switch 16e judges whether it is ON If it is "NO" at Step S73, and it is got blocked, it right [1st] switch 14e Reaches and both 2nd right switch 16e is not turned on, it returns to the same step S73. If it will be got blocked and it will right [1st] switch 14e Reach on the other hand, if it is "YES" at Step S73, and either of the 2nd right switch 16e is turned on, it will return to Step S59 shown by drawing 15 .

[0119] According to this example, in a setup etc. and play in game mode, since it is only operated using the 1st controller or the 2nd controller, there is no troublesomeness which is operated using a manual controller. That is, operation is easy.

[0120] In addition, various setup, such as game mode shown in this example, the rule of a game, game advance, and various screens are mere instantiation, and these cannot be overemphasized by that it is freely changeable with a programmer and a designer.

[0121] Moreover, in this example, although the player recognition switch was formed in both the 1st controller and the 2nd controller, since what is necessary is just to detect the existence of the 2nd player at least, it is not necessary to form a player recognition switch in the 1st controller.

[0122] Furthermore, in this example, in one-person play game mode, although the player was operated using the 1st controller, an one-person play game can also be enjoyed using the 2nd controller. In this case, for example, 1P play screen only containing the game screen for the 2nd player is displayed. However, it is necessary to recognize the existence and the number of a player in this case based on the output of the player recognition switch of the 1st controller and the 2nd controller, and to go on a game.

[Translation done.]

* NOTICES *

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1.This document has been translated by computer. So the translation may not reflect the original precisely.

2.**** shows the word which can not be translated.

3.In the drawings, any words are not translated.

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] It is the illustration view showing the system of this invention.

[Drawing 2] It is the block diagram showing the structure of a system shown in the drawing 1 example.

[Drawing 3] It is the illustration view showing the storing state with a main part built-in [ROM] shown in drawing 2 .

[Drawing 4] It is the illustration view showing the storing state of the exterior ROM shown in drawing 2 .

[Drawing 5] It is the external view showing the configuration of a cartridge connector and a memory cartridge.

[Drawing 6] It is the illustration view showing the configuration of a cartridge connector and a memory cartridge.

[Drawing 7] It is the illustration view showing a high-speed processor and a connection state with a main part built-in [ROM].

[Drawing 8] It is the illustration view showing the high-speed processor and main part built-in ROM and the connection state of Exterior ROM.

[Drawing 9] It is the illustration view showing the address space seen from the high-speed processor.

[Drawing 10] It is the illustration view showing the mapping state of the address space when not being equipped with the memory cartridge.

[Drawing 11] It is the illustration view showing the mapping state of the address space when being equipped with the memory cartridge.

[Drawing 12] It is the flow view showing a part of processing of CPU shown in drawing 2 .

[Drawing 13] It is the flow view showing a part of other processings of CPU shown in drawing 2 .

[Drawing 14] It is the flow view showing a part of others of processing of CPU shown in drawing 2 .

[Drawing 15] It is the flow view showing a part of processing of further others of CPU shown in drawing 2 .

[Drawing 16] It is the flow view showing a part of other processings of CPU shown in drawing 2 .

[Drawing 17] It is the illustration view showing an example of the title screen of a dance game.

[Drawing 18] It is the illustration view showing an example of the profile selection screen of a dance game.

[Drawing 19] It is the illustration view showing an example of content change of profile / check screen of a dance game.

[Drawing 20] It is the illustration view showing an example of the game mode selection screen of a dance game.

[Drawing 21] It is the illustration view showing an example of the music selection screen of a dance game.

[Drawing 22] It is the illustration view showing an example of 1P play screen of a dance game.

[Drawing 23] It is the illustration view showing other examples of the game mode selection screen of a dance game.

[Drawing 24] It is the illustration view showing an example of 2P play screen of a dance game.

[Description of Notations]

10 — System

12 — Game Equipment

14 16 — Controller

18 — AV Cable

20 — Television

22 — Memory Cartridge

24 — Heartbeat Sensor

30 — High-speed Processor

32 — System Bus

34 — Main Part Built-in ROM

36 — Memory Cartridge ROM

[Translation done.]

*** NOTICES ***

Japan Patent Office is not responsible for any damages caused by the use of this translation.

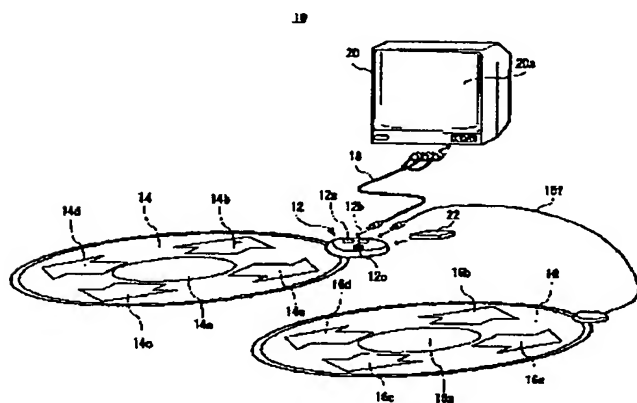
1.This document has been translated by computer. So the translation may not reflect the original precisely.

2.**** shows the word which can not be translated.

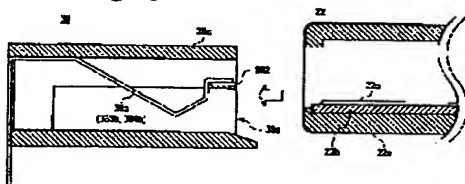
3.In the drawings, any words are not translated.

DRAWINGS

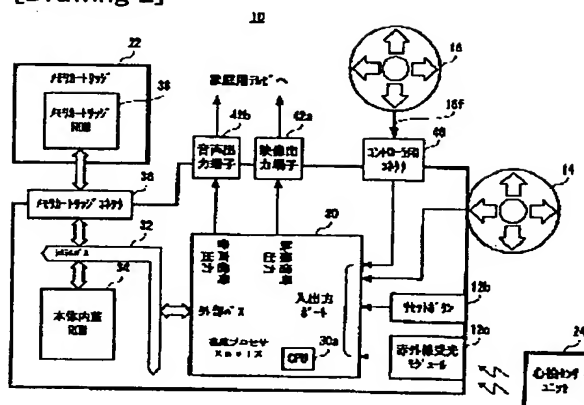
[Drawing 1]



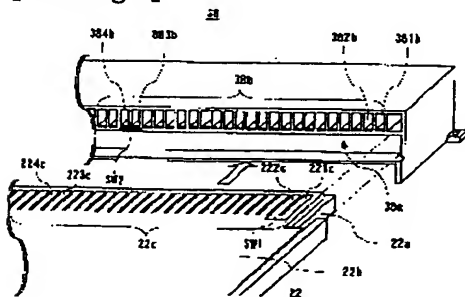
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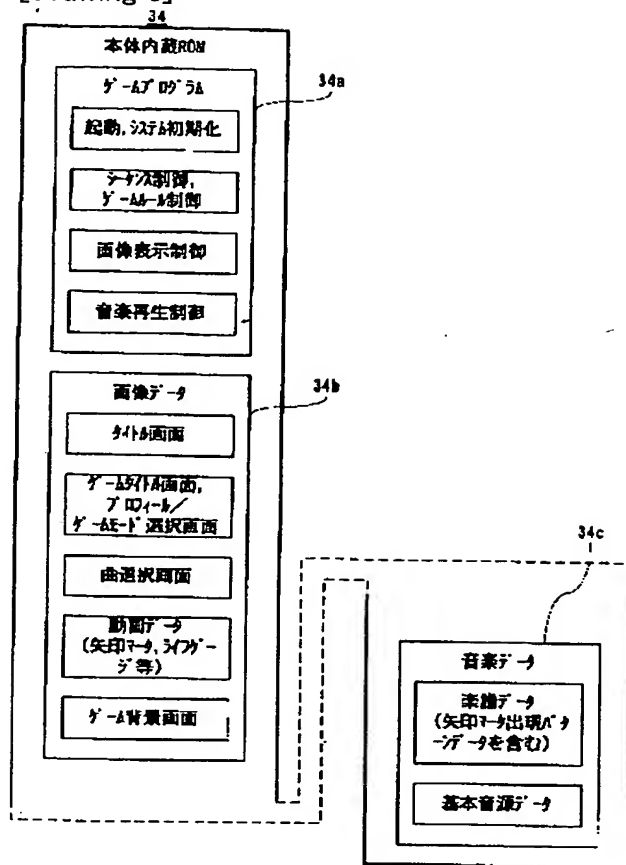
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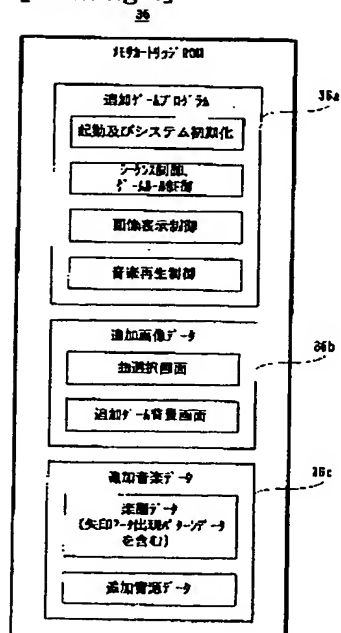
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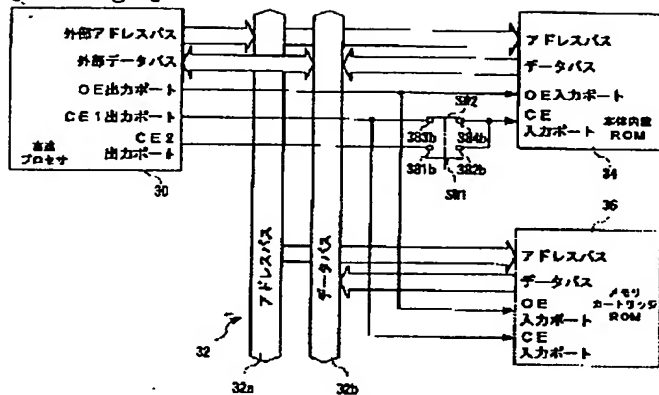
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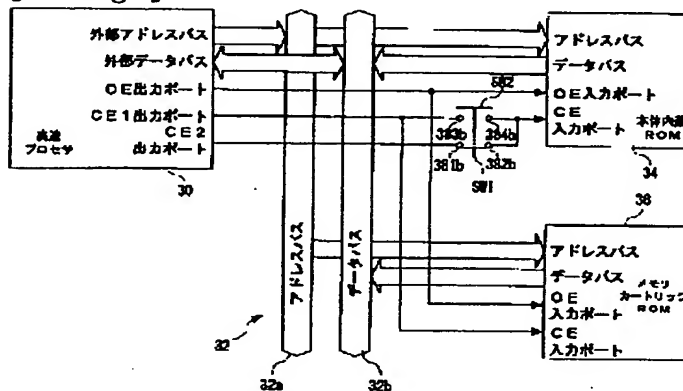
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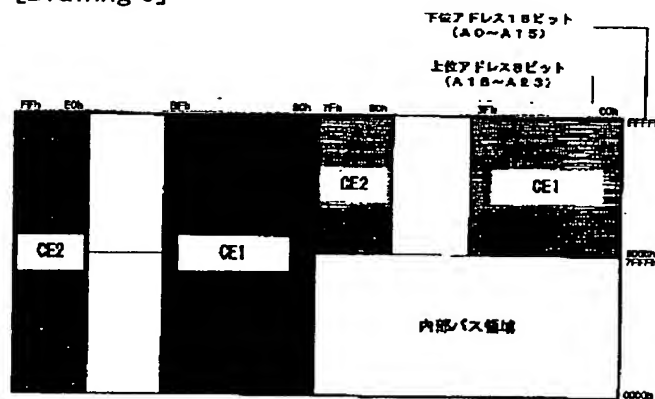
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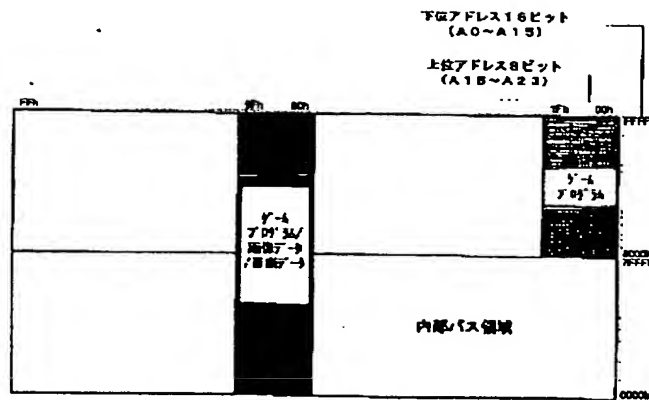
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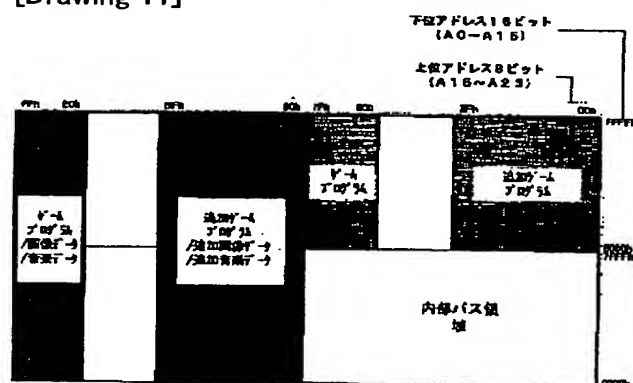
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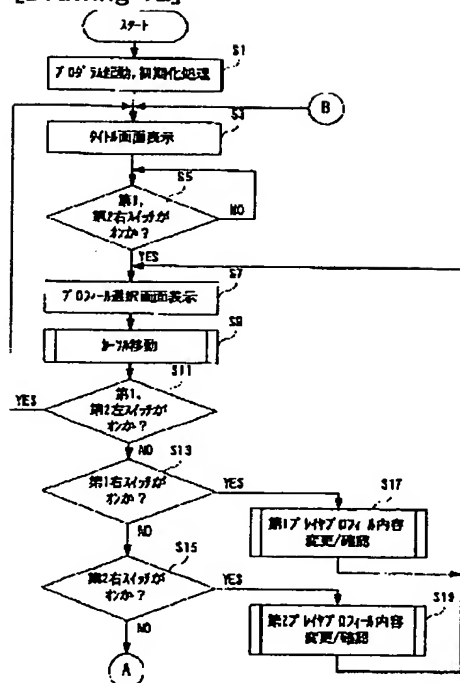
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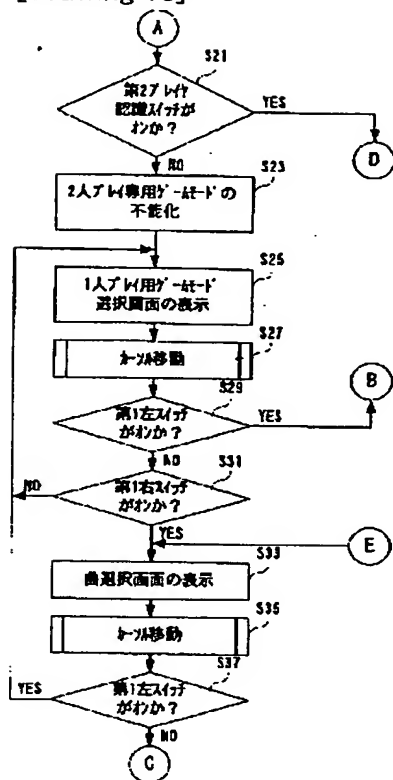
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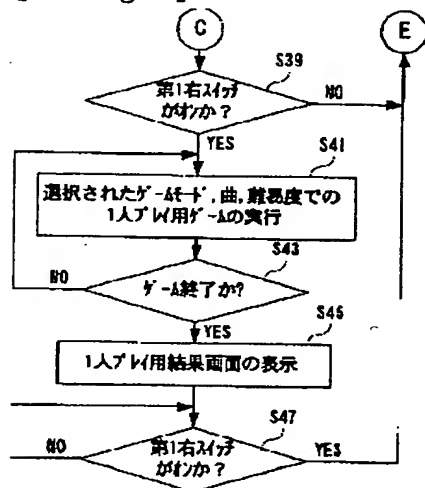
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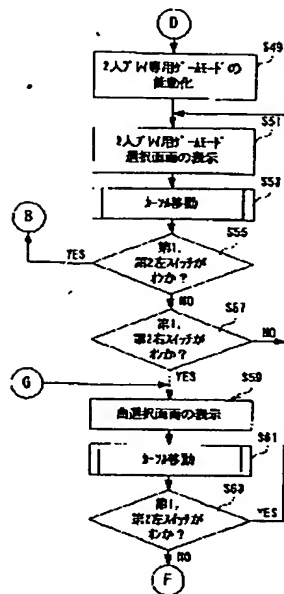
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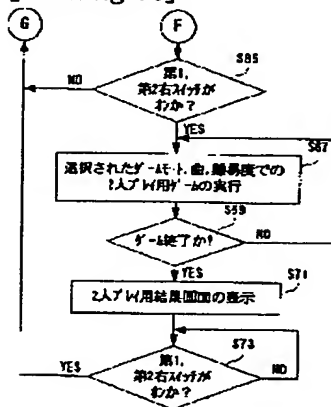
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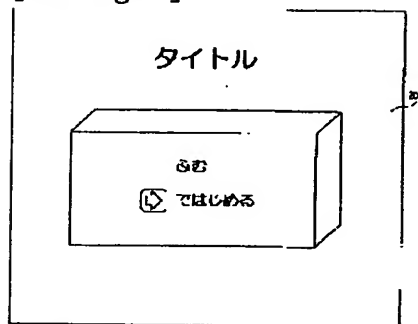
[Drawing 15]



[Drawing 16]



[Drawing 17]



[Drawing 18]

♂	10さい	30kg
♀	IP 10さい	30kg
♂	40さい	65kg
♀	40さい	55kg
♂	70さい	55kg
♀	70さい	50kg

☐ ☐ でせんとく ☐ で決定 ☐ で戻る

[Drawing 19]

選択されたプロフィール

IP

♂ 10さい 30kg

これでよろしいですか？

☐ で決定 ☐ で戻る

[Drawing 20]

ふみりーモード

おにいちゃん・おねえちゃんモード

パパ・ママモード

☐ ☐ でせんとく ☐ で決定 ☐ で戻る

[Drawing 21]

透明なマニキュア Kouryuu+Gaba ☐

透明なマニキュア Kouryuu+Gaba ☐

恋は天気 ナチュラルペ ☐

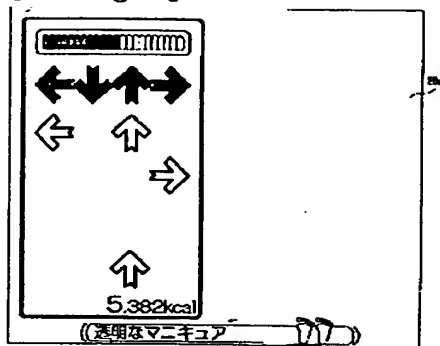
恋は天気 ナチュラルペ ☐

TOON MANIAC Theme from "TOON MANIA" ☐

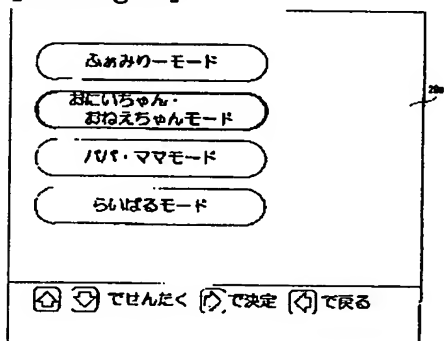
TOON MANIAC Theme from "TOON MANIA" ☐

☐ ☐ でせんとく ☐ で決定 ☐ で戻る

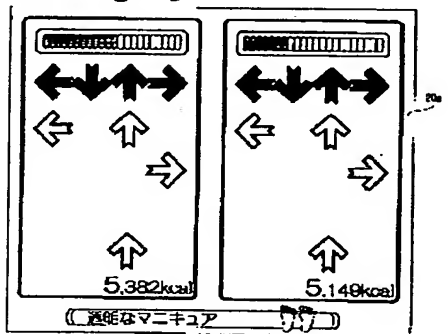
[Drawing 22]



[Drawing 23]



[Drawing 24]



[Translation done.]